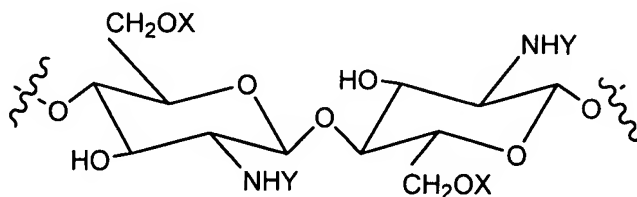


Listing of the claims:

**CLAIMS**

1. (Currently Amended) An N-acylated chitinous polymer, wherein said chitinous polymer is comprised of subunits of the formula:



wherein

X is independently selected from hydrogen,  $-(CH_2)_bCOG$ , or  $-(CH_2)_bCOOZ$  for each occurrence, provided that at least 10% of X groups on said polymer are  $-(CH_2)_bCOOZ$  or  $-(CH_2)_bCOG$ ;

Y is independently selected from  $-C(=O)-R-CO_2Z$ ,  $[-C(C=O)-R-COG]$ ,  $-C(=O)-R-COG$ , hydrogen, carboxyalkyl, acetyl, or a pharmaceutically acceptable salt thereof for each occurrence, provided that at least 1 % of Y groups on said polymer are  $-C(=O)-R-CO_2Z$  or  $[-C(C=O)-R-COG]$ ;  $-C(=O)-R-COG$ ;

R is independently selected from the group consisting of alkyl, alkenyl, and aryl;

b is 1-8;

G is an agent or a pharmaceutically acceptable salt thereof; and

Z is hydrogen, a cation, an agent, or a pharmaceutically acceptable salt thereof, and wherein the degree of carboxylation from the carboxymethyl group is lower than the degree of carboxylation from the R group.

2. (Original) The N-acylated chitinous polymer of claim 1, wherein at least 30% of said X groups on said polymer are of the formula  $-(CH_2)_bCOOZ$  or  $-(CH_2)_bCOG$ .
3. (Original) The N-acylated chitinous polymer of claim 1, wherein b is 1-5.

4. (Original) The N-acylated chitinous polymer of claim 3, wherein b is 1.
5. (Original) The N-acylated chitinous polymer of claim 1, wherein at least 10% of said Y groups on said polymer are  $-C(=O)-R-CO_2Z$  or  $[-C(C=O)-R-COG]$ - $C(=O)-R-COG$ .
6. (Original) The N-acylated chitinous polymer of claim 5, wherein at least 20% of said Y groups on said polymer are  $-C(=O)-R-CO_2Z$  or  $[-C(C=O)-R-COG]$ - $C(=O)-R-COG$ .
7. (Previously Presented) The N-acylated chitinous polymer of claim 1, wherein R is an alkyl group having the formula  $-(CH_2)_a-$ , wherein a is 1-8.
8. (Original) The N-acylated chitinous polymer of claim 7, wherein a is 2, 3, or 4.
9. (Original) The N-acylated chitinous polymer of claim 1, wherein R is aryl.
10. (Previously Presented) The N-acylated chitinous polymer of claim 1, wherein R further comprises one or more heteroatoms.
11. (Currently Amended) The N-acylated chitinous polymer of claim 1, wherein said polymer is comprised of ~~subunits~~ polymers selected from the group consisting of N,O-carboxymethyl-N-succinylchitosan, N,O-carboxymethyl-N-citraconylchitosan, N,O-carboxymethyl-N-glutarylchitosan, and mixtures thereof.
12. (Original) The N-acylated chitinous polymer of claim 1, wherein said polymer is water soluble.
13. (Original) The N-acylated chitinous polymer of claim 10, wherein said polymer is water soluble at pH's from about 1 to about 11.
14. (Original) The N-acylated chitinous polymer of claim 1, wherein Z is an agent.
15. (Original) The N-acylated chitinous polymer of claim 1 or 14, wherein said agent is a therapeutic agent.
16. (Original) The N-acylated chitinous polymer of claim 15, wherein said therapeutic agent is an anti-cancer agent.

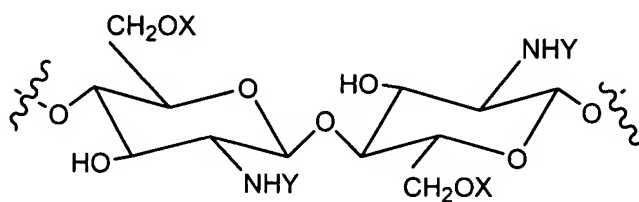
17. (Original) The N-acylated chitinous polymer of claim 15, wherein said therapeutic agent is an agent for the treatment of a central nervous system disorder.

18. (Original) The N-acylated chitinous polymer of claim 15, wherein said therapeutic agent is an anti-inflammatory agent.

19. (Original) The N-acylated chitinous polymer of claim 13, wherein said therapeutic agent is selected from the group consisting of 5-aminosalicylic acid, doxorubicin, peptides, and mixtures thereof.

20-50. (withdrawn)

51 (New) An N-acylated chitinous polymer, wherein said chitinous polymer is comprised of subunits of the formula:



wherein

X is independently selected from hydrogen,  $-(CH_2)_bCOG$ , or  $-(CH_2)_bCOOZ$  for each occurrence, provided that at least 10% of X groups on said polymer are  $-(CH_2)_bCOOZ$  or  $-(CH_2)_bCOG$ ;

Y is independently selected from  $-C(=O)-R-CO_2Z$ ,  $-C(=O)-R-COG$ , hydrogen, carboxyalkyl, acetyl, or a pharmaceutically acceptable salt thereof for each occurrence, provided that at least 1 % of Y groups on said polymer are  $-C(=O)-R-CO_2Z$  or  $-C(=O)-R-COG$ ;

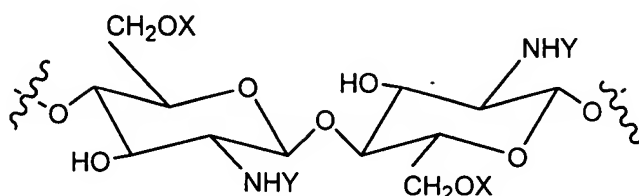
R is aryl;

b is 1-8;

G is an agent or a pharmaceutically acceptable salt thereof; and

Z is hydrogen, a cation, an agent, or a pharmaceutically acceptable salt thereof.

52. (New) An N-acylated chitinous polymer, wherein said chitinous polymer is comprised of subunits of the formula:



wherein

X is independently selected from hydrogen,  $-(CH_2)_bCOG$ , or  $-(CH_2)_bCOOZ$  for each occurrence, provided that at least 10% of X groups on said polymer are  $-(CH_2)_bCOOZ$  or  $-(CH_2)_bCOG$ ;

Y is independently selected from  $-C(=O)-R-CO_2Z$ ,  $-C(=O)-R-COG$ , hydrogen, carboxyalkyl, acetyl, or a pharmaceutically acceptable salt thereof for each occurrence, provided that at least 1 % of Y groups on said polymer are  $-C(=O)-R-CO_2Z$  or  $-C(=O)-R-COG$ ;

R is independently selected from the group consisting of alkyl, alkenyl, and aryl; wherein R further comprises one or more heteroatoms;

b is 1-8;

G is an agent or a pharmaceutically acceptable salt thereof; and

Z is hydrogen, a cation, an agent, or a pharmaceutically acceptable salt thereof.